

REMARKS

I. Formal Matters

Claims 1-23 are pending in the application. Claims 1-18 have been examined. By this amendment Applicants add new claims 19-23 to further define the scope of the invention.

Applicants thank the Examiner for acknowledging the receipt of priority documents submitted under 35 U.S.C. 119(a)-(d). Applicants also thank the Examiner for acknowledging the drawings filed on April 19, 2004. Additionally, Applicant thanks the Examiner for acknowledging the references filed with the Information Disclosure Statement of April 19, 2004, indicating that all of the references cited on the form have been considered and made of record.

II. Objection to the Specification

By this Amendment Applicants amend the title to incorporate the recommendations of the Examiner. Applicants also amend the abstract of the specification as requested by the Examiner. Finally, Applicants amend the specification to correct a scrivener's error. The amendment to the specification adds no new matter.

III. Claim Rejections Under 35 U.S.C. § 112

The Examiner has rejected claims 1-18 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have editorially amended the claims for clarity and precision of language, and as such, respectfully submit that this rejection is now moot.

IV. Claim Rejections Under 35 U.S.C. § 102

Rejection Under Bischoff

The Examiner has rejected claims 1-3 and 13-15 under 35 U.S.C. § 102(b) as allegedly being anticipated by Bischoff et al. (U.S. Patent No. 5,237,476). Applicants respectfully disagree.

With regard to independent claim 1, this rejection is respectfully traversed as Bischoff does not disclose, or even suggest, at least the “guide block which is set adjacent to a position of up-stream of a line of said magnetic tape passing said servo signal recording head and is slightly set back from said sliding surface of said servo signal recording head so that said magnetic tape slides on an edge of said servo signal recording head and on an outer edge of said guide block,” as recited in claim 1.

Instead, Bischoff describes a compact tape head assembly using thin film heads. Each head bar of Bischoff supports a number of thin film heads. Each head bar is contoured and lapped at its top surface. (See col. 2, ll. 67-68). Next a number of head bars are joined together to form a multi-element read write device, as shown in FIG. 7. Finally, “nonmagnetic end pieces are attached to the exposed outer surfaces of the outer head assemblies to enable assembly of the read/write multi-element into a head mount.” The bars are contoured so that “the magnetic tape makes contact with the recording devices for transducing relation with the head gaps located at the top of the thin tape head assembly.” (See Col. 4, ll. 12-15).

The Examiner contends that FIG. 7 shows a device where the magnetic tape slides on the edge of head bars 16 (the alleged servo recording head), and on the edges the nonmagnetic end

pieces (the alleged guide blocks). Applicants respectfully disagree. There is no disclosure of the magnetic tape running on the edge of the head bars, or on the edge of the nonmagnetic end pieces in Bischoff.

In fact, Bischoff fails to even suggest such a device. If Bischoff functioned in the manner asserted by the Examiner, the tape would fail to make contact with the head gaps located at the top of the head assembly, as the tape would run along only the outer edge of each head assembly. This is precisely the reason that each head band in Bischoff is contoured. For at least the above reasons, Applicants respectfully assert that claim 1 is not anticipated by Bischoff.

With regard to independent claims 2 and 3, Applicants respectfully assert that claims 2 and 3 are not anticipated by Bischoff for reasons analogous to those recited with respect to claim 1. As claims 13, 14 and 15 depend from claims 1, 2 and 3 respectively, Applicants assert that claims 13, 14 and 15 are patentable at least by virtue of their respective dependencies.

Rejection Under Biskeborn

The Examiner has also rejected claims 1-6 and 13-15 under 35 U.S.C. § 102(b) as allegedly being anticipated by Biskeborn et al. (U.S. Patent No. 5,883,770). Applicants respectfully disagree.

With regard to independent claim 1, this rejection is respectfully traversed as Biskeborn, also fails to disclose, or even suggest, at least the "guide block which is set adjacent to a position of up-stream of a line of said magnetic tape passing said servo signal recording head and is slightly set back from said sliding surface of said servo signal recording head so that said

magnetic tape slides on an edge of said servo signal recording head and on an outer edge of said guide block,” as recited in claim 1.

Instead, Biskeborn discloses a magnetic tape recording head wherein the wrap angle of the tape around the recording head is controlled using the surfaces of outriggers 24 and 25 (See e.g. FIG. 4). As can be seen in FIGS. 5, 11, 12, 13, and 14, the magnetic tape is parallel to at least part of the surface of the outriggers 24 and 25 in order to accommodate the slight wrap angle for the head 20. Thus, Biskeborn fails to disclose or even suggest, the magnetic tape sliding on the outer edge of the outriggers. For at least this reason, Applicants respectfully assert that claim 1 is not anticipated by Biskeborn.

With regard to independent claims 2 and 3, Applicants submit that claims 2 and 3 are not anticipated by Biskeborn for reasons analogous to those recited with respect to claim 1. As claims 4 and 13 depend from claim 1, claims 5 and 14 depend from claim 2, and claims 6 and 15 depend from claim 3, Applicants submit that claims 4-6 and 13-15 are patentable at least by virtue of their respective dependencies. They are also patentable because of the additional limitations recited therein.

For example, Biskeborn fails to disclose, or even suggest “a wrap angle θ_1 between said sliding surface of said recording head and a plane surface formed by the edge of said servo signal recording head and said outer edge of said guide block is in a range of 1.0 to 6.0 degrees,” as recited in claim 4.

Not only does Biskeborn fail to disclose a range of “1.0 to 6.0 degrees” as recited in claim 4, but Biskeborn, at most, refers to an angle formed between the head and the edge formed

in the middle of the outriggers 24 and 25. Since the magnetic tape is in parallel with the outer surfaces of the outriggers, it does not form an angle with that said same surface. Thus, Biskeborn does not disclose *any* range between the “the edge of said servo signal recording head and said outer edge of said guide block.”

To the extent that Biskeborn describes wrap angles, it appears it describes the wrap angles about the head, but this does not inherently dictate the angle formed by the sliding surface and the middle edge of the trigger formed by the slanted surface. Thus, Applicants respectfully assert that Biskeborn fails to describe all of the unique features of claim 4. With regard to claims 5 and 6, Applicants respectfully assert that those Biskeborn fails to anticipate all of the unique features of claims 5 and 6 for reasons analogous to those recited with respect to claim 4 above.

V. Claim Rejections Under 35 U.S.C. § 103

Claims 7-12 and 16-18 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Biskeborn. Applicants respectfully disagree.

Claims 7, 10 and 16 depend from claim 1, claims 8, 11 and 17 depend from claim 2 and claims 9, 12 and 18 depend from claim 3. As discussed above, Biskeborn fails to disclose, or even suggest all of the unique elements of independent claims 1, 2 and 3. Thus, Applicants respectfully assert that claims 7-12 and 16-18 are patentable at least by virtue of their respective dependencies.

VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Applicant herewith petitions the Director of the USPTO to extend the time for reply to the above-identified Office Action for an appropriate length of time if necessary. Unless a check is attached, any fee due under 37 U.S.C. § 1.17(a) is being paid via the USPTO Electronic Filing System (EFS). The USPTO is also directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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